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"Hangcha Forklift"  
App herunterladen



ISO14001  
ISO14001:2015



ISO9001  
ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.

HANGCHA Group Co., LTD behält sich das Recht vor, Änderungen bezgl. Farbe, Spezifikationen, Ausstattung und sonstige Details, dierer Bröschüre ohne Vorankündigung vorzunehmen. Fahrzeugfarben können von den Farben in dieser Brochure abweichen.



# XH SERIES

HIGH-VOLTAGE LITHIUM  
BATTERY FORKLIFT

With capacity of 12,000 to 18,000kg



# XH SERIES HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

XH series high-voltage lithium battery forklifts are new series of high-voltage lithium battery forklifts independently developed by Hangcha relying on the new energy automobile voltage platform for the first time based on the deep understanding of electric forklifts and internal combustion forklifts for decades by breaking through the traditional design concept. The series of models redefine electric forklifts in terms of efficiency, power and reliability, and replace the internal combustion with electric forklifts.

VOLTAGE

**608 V**

VEHICLE WATER RESISTANCE

**IPX4**

PROTECTION RATE

**IP67**

SPEED MODELS

**3** S/P/E mode  
[Super/Power/Eco]

TRAVEL SPEED

**28km/h**

## Exterior

/ Following the appearance of X series internal combustion forklifts, the series boast smooth and powerful contour lines, and exquisite and compact vehicle body, presenting both fashion and steadiness as a whole.

THE *Plus*  
FOR YOUR  
BUSINESS





# FASTER & MORE EFFICIENCY.

Fast charging makes it possible for the whole vehicle to work continuously, shortening the waiting time and greatly improving efficiency.

**LI-ION**  
TECHNOLOGY

**6 YEARS**  
WARRANTY

HANGCHA provides Li-ion battery (LiFeP04) with 6 years or 12000 hours warranty.

**HIGH  
VOLTAGE**  
LITHIUM ION

Through disruptive battery and fast charging technology, the charging time is greatly shortened.

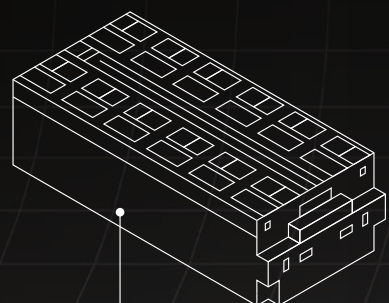




# WHAT IS HIGH-VOLTAGE AND WHAT ARE IT'S ADVANTAGES?

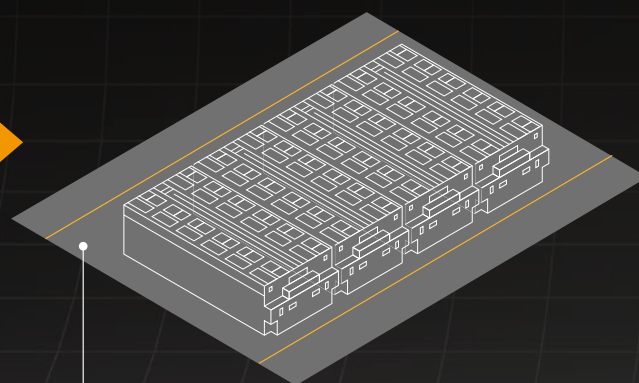
Discover the power of Hangcha's 16-ton electric forklift, engineered with a high-voltage lithium battery system at 608V for unmatched efficiency. Designed to operate with lower current, it maximizes power density and optimizes energy usage. Experience extended operational hours and quicker charging times, setting new standards in performance and productivity.

**608V**  
HIGH-VOLTAGE



A MODULE

A collection of cells connected in series or in parallel.



A PACK

A series of individual modules and protection systems organized in a shape that will be installed in a truck.

**HIGH-VOLTAGE  
ELECTRICAL SYSTEMS** ⚡

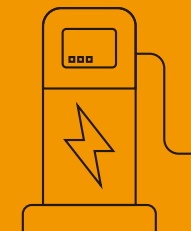
How does our lithium electric forklifts boost performance and efficiency?

## 01 | Speeds up charging and reduces heat generation.

To shorten charging times, boosting charging power is essential, and there are two ways to achieve this:

**1. Increase system voltage    2. Increase current**

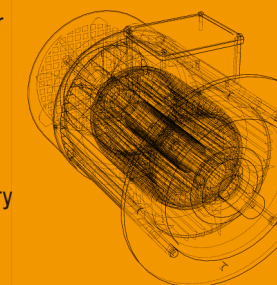
However, increasing the current without adjusting resistance can cause excessive heat, potentially leading to battery overheating. From the standpoint of energy consumption, this heat from the battery pack and high-voltage cables results in greater electrical losses within the system. By raising the voltage, we enhance charging speed while preventing overheating issues in both the battery pack and charging stations. Hangcha's battery system incorporates an advanced independent thermal management system.



## 02 | Enhance motor efficiency and lower operational costs.

Models equipped with a high-voltage system feature compact yet powerful motors, enhancing motor power density while minimizing heat output from the battery and cables. This reduction in heat leads to lower maintenance costs and allows for the use of slimmer cables, simplifying the wiring layout economically.

Our charging stations benefit from this configuration, eliminating the need for liquid cooling and thereby reducing overhead. They are equipped with Super-Fast Charging Technology that can fully charge the battery in just 1.3 hours.



Hangcha's high-voltage lithium electric forklift boosts charging speed, prolongs battery life, and minimizes costs, providing unparalleled efficiency and value.



# LI-ION BATTERIES AND CHARGERS

A built in electronic control circuit for Li-ion battery pack is unique. The BMS(Battery Management System) provides the protection system available to protect and enhance the performance of these batteries. By always keeping the batteries within safe operating conditions, this electronic control ensures that batteries accept more charges than conventional batteries.



## Standard Battery and Charging Time

	12 to 16T @600mm	14 to 16T @900mm	18T @600mm	16T @1200mm
Standard Battery (V/Ah)	541/228	608/302	608/302	608/302
Standard Battery (kWh)	123	184	184	184
Number of charging port	1	1	1	1
Charging time (SOC 20-100%/Charger capacity 120kW)	1.0h	1.3h	1.3h	1.3h
Operating Temperature-Discharge ( °C )	-30 °C ~60 °C	-30 °C ~60 °C	-30 °C ~60 °C	-30 °C ~60 °C
Operating Temperature-Charge ( °C )	0 °C ~60 °C	0 °C ~60 °C	0 °C ~60 °C	0 °C ~60 °C
Protection Class	IP67	IP67	IP67	IP67

## Optional Battery and Charging Time

	12 to 16T @600mm	14 to 16T @900mm	18T @600mm	16T @1200mm
Optional Battery (V/Ah)	608/302	541/456	541/456	541/456
Optional Battery (kWh)	184	246	246	246
Number of charging port	1	1	1	1
Charging time (SOC 20-100%/Charger capacity 120kW)	1.5h	1.94h	1.94h	1.94h
Operating Temperature-Discharge ( °C )	-30 °C ~60 °C	-30 °C ~60 °C	-30 °C ~60 °C	-30 °C ~60 °C
Operating Temperature-Charge ( °C )	0 °C ~60 °C	0 °C ~60 °C	0 °C ~60 °C	0 °C ~60 °C
Protection Class	IP67	IP67	IP67	IP67

# CHARGING STRATEGY

When the charging system is designed with a dual charging gun, the charging distribution can be designed using average distribution mode and automatic distribution mode to efficiently complete charging tasks.

01

Average Distribution Mode: The dual gun output power can be switched online. When Gun A is fully powered, and Gun B is connected and starts charging, the system will switch 50% of the rated power to Gun B while still supplying Gun A until Gun A or Gun B completes charging.

02

Automatic Distribution Mode: Set the first charging interface as the rated power output. Start distributing the power in increments to the second charging interface until the charging station stabilizes. The two charging interfaces can output simultaneously, and the power distribution increments of the charging station are 20 kW. Repeat the above steps until the first charging interface stops charging, and the second charging interface reaches the maximum rated power.



# INTEGRATED CHARGER

120kW Product performance:

Operating voltage:  
AC380V±15%  
  
Input mode:  
Three-phase five-wire system

Output voltage range (V):  
200Vdc ~ 1000Vdc

Efficiency: ≥94%  
IP Level: IP54

Working temperature:  
-20 °C - +50 °C

Dimension:  
750\*850\*1890(mm)



# EXCELLENT ERGONOMIC DESIGN

## Comfort

- / The wide-view mast with optimized design is unlikely to obstruct the operator's line of sight. The enlarged opening size of the fork carriage enables a wider view, a large operation space, and excellent ergonomic design.
- / The multifunctional color-screen instruments are designed to have graphical interfaces and display data clearly. The interfaces can be switched to be shown in Chinese and English to meet the needs of customers at home and abroad.
- / The new fully-suspended cab with panoramic view enables a clearer view. Performance of the air conditioner is improved to enable uniform conditioned air blowing from the air outlet and a strong cooling effect. The waterproof, dust-proof, heatproof, soundproof, noise-reducing sealing design improves driving comfort. The molded interior parts enable a more comfortable feel. The integral frame is constituted by profiled steel pipes. The structural parts have higher strength.
- / Integrated handle and pilot remote control allow flexible and accurate operation; hydraulic brake curve is optimized to achieve smooth and easy-to-control braking; suspension seat, following the floating multi-direction adjustable control platform, is comfortable to control.



## Maintainability

- / The over-turnable cab and electric tipping cylinder make tipping easier and more labor-saving.
- / The wide-opened hood better facilitate repair and maintenance of electrical components.



## Advancement

- / Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems. The driving speed, upslope degree and acceleration performance rival that of internal combustion vehicles, and the environmental performance is better than that of internal combustion vehicles.
- / The vehicle's 541V high-voltage platform, equipped with a heavy truck water-cooled standard box, features better heat dissipation, longer endurance mileage and more durable battery.
- / This is the first time that the electric control and motor adopt water-cooled control mode, which obtains better heat dissipation, allows long-term and high-intensity work exactly like an internal combustion forklift.
- / The vehicle adopts a whole machine controller to redeploy the traction integrated controller (PDU+DC/DC+MCU) and two-in-one oil pump controller to form an intelligent driving system, being light-weighted, efficient and independent.



## Safety

- / The cover of the vehicle is designed to be sealed to the water resistance level of IPX4. All the motor, electronic controls and high-voltage components reach the dust and water resistance level of IP67, a high protection level adequate to withstand harsh operating environments and ensure safety and reliability.
- / The electrical system is equipped with high-voltage interlocks, insulation detection, and vehicle-grade safety means. The MSD (Manual Service Disconnect)maintenance switch enables one-click power-down and safer maintenance.
- / Some key structural parts have been verified highly reliable by the market for many years while being used by internal combustion forklifts.

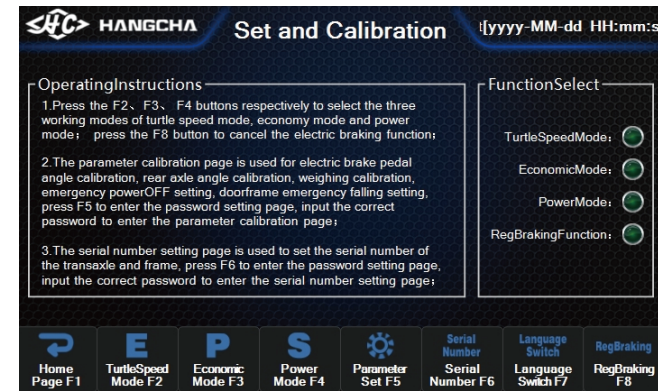




# ENERGY SAVING AND HIGH EFFICIENCY

## Braking energy recovery strategy

/ When the gear switch is in N gear or the accelerator pedal is released, the braking energy recovery function is activated, and vehicle decelerates and stops based on braking force and friction (without stepping on the foot brake), and the braking feedback current meets the allowable range of the battery.



## Intelligent

/ A vehicle central controller is provided, which has bus architecture, several built-in diagnosis and management functions and a central fault alarm function.

/ An optional intelligent management system is provided to enable intelligent remote monitoring and easier equipment management and logistics management.



THE *Plus*  
FOR YOUR  
BUSINESS



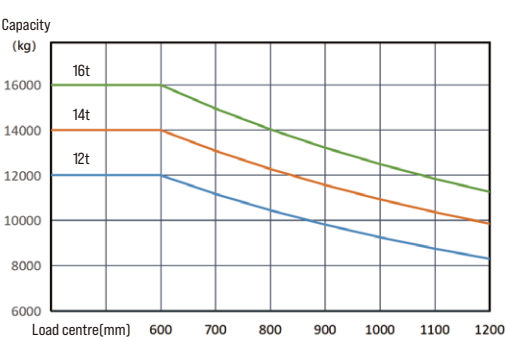
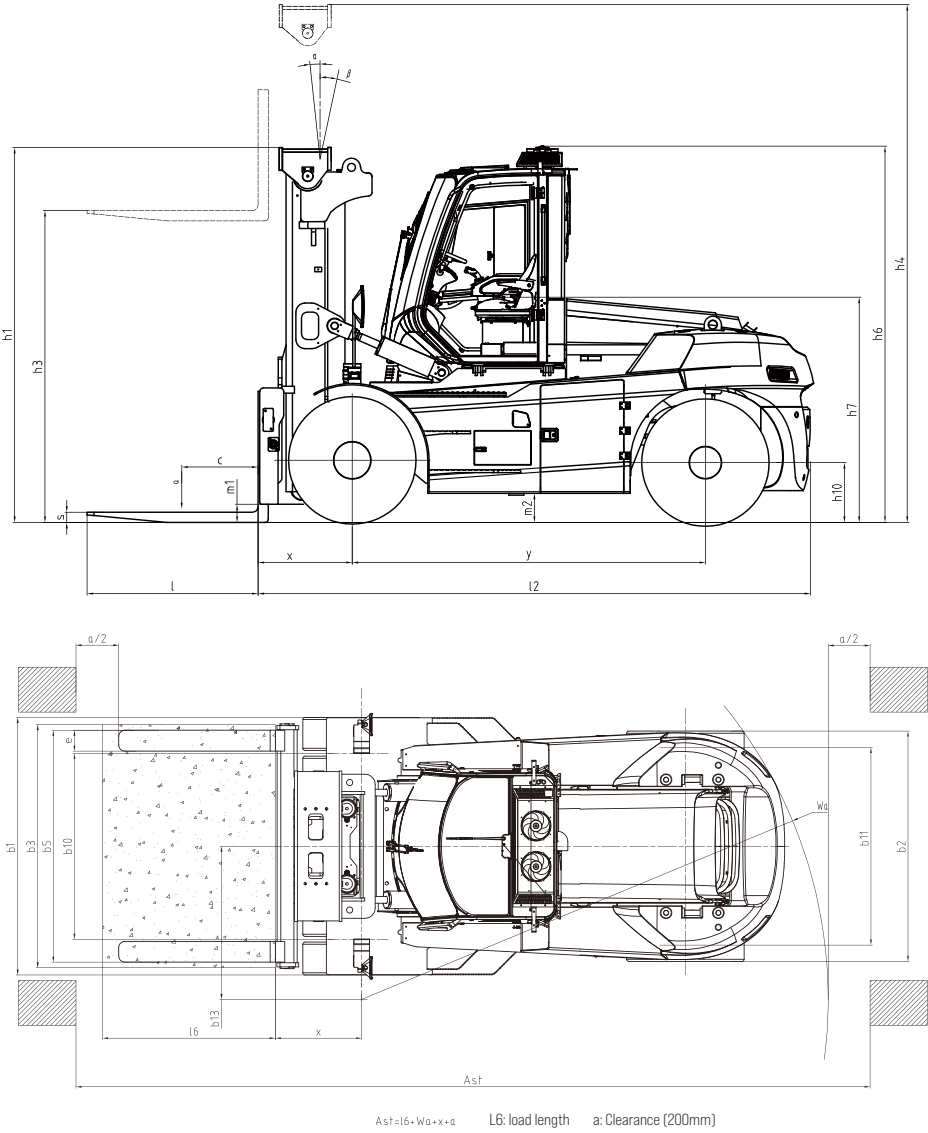


XH Series 12-16t High-voltage Lithium Battery Forklift Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.		
	1.2	Manufacturer's type designation		CPD120-XHXL2G	CPD140-XHXL2G	CPD160-XHXL2G
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	12000	14000	16000
	1.6	Load centre distance	c (mm)	600	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	746	825	825
Weight	1.9	Wheelbase	y (mm)	3100	3100	3100
	2.1	Service Weight	kg	17000	19400	20500
	2.2	Axle loading, laden front/rear	kg	24590/3410	30200/3200	32800/3700
Tyres, chassis	2.3	Axle loading, unladen front/rear	kg	8300/8700	9700/9700	9430/11070
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		pneumatic	pneumatic	pneumatic
	3.2	Tyre size, front		10.00-20-18PR	11.00-20-18PR	12.00-20-20PR
	3.3	Tyre size, rear		10.00-20-18PR	11.00-20-18PR	12.00-20-20PR
	3.5	Wheels, number front / rear (x = driven wheels)		4x/2	4x/2	4x/2
	3.6	Tread, front	b10 (mm)	1780	1780	1780
	3.7	Tread, rear	b11 (mm)	1890	1890	1890
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	$\alpha/\beta(^{\circ})$	6/12	6/12	6/12
	4.2	Height, mast lowered	h1 (mm)	3180	3270	3290
	4.4	Lift	h3 (mm)	3000	3000	3000
	4.5	Height, mast extended	h4 (mm)	4695	4790	4790
	4.7	Height of cabin	h6 (mm)	3265	3280	3300
	4.8	Seat height/stand height	h7 (mm)	1925	1940	1960
	4.12	Coupling height	h10 (mm)	538	553	573
	4.19	Overall length	l1 (mm)	6190	6260	6350
	4.20	Length to face of forks	l2 (mm)	4690	4760	4850
	4.21	Overall width	b1 (mm)	2460	2460	2460
	4.22	Fork dimensions	s/e/l (mm)	80/200/1500	90/200/1500	90/200/1500
	4.24	Fork-carriage width	b3 (mm)	2372	2372	2372
	4.25	Distance between fork-arms	b5 (mm)	520/2200	520/2200	520/2200
	4.31	Ground clearance, laden, below mast	m1 (mm)	235	250	270
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	220	235	255
	4.34.1	Aisle width for pallets crossways	As1 (mm)	6795	6875	6975
	4.35	Turning radius	Wa (mm)	4350	4350	4450
Performance data	5.1	Travel speed, laden/unladen	km/h	23/25	23/25	26/27
	5.2	Lift speed, laden/unladen	m/s	0.4/0.5	0.35/0.45	0.35/0.4
	5.6	Max. Drawbar pull, laden/unladen	N	100000	100000	100000
	5.8	Max. gradeability, laden/unladen	%	30/30	30/30	25/25
	5.10	Service brake		Wet disc brake system(WDB)	Wet disc brake system(WDB)	Wet disc brake system(WDB)
Electric drivetrain		Parking brake		Spring Applied,Hydraulic release multidisc brake(SAHR)		
	6.1	Drive motor rating S9 60 min Rated/Peak	kW	120/240	120/240	120/240
	6.2	Lift motor rating at S9 15% Rated/Peak	kW	2x50/100	2x50/100	2x50/100
	6.4	Battery Capacity	kWh / Ah	123/228	123/228	123/228
		Nominal Voltage	V	541	541	541
	6.5	Battery weight	kg	1100	1100	1100
		Battery dimensions	l/b/h(mm)	1884/715/629	1884/715/629	1884/715/629
Addition data		Max. battery weight	kg	1500	1500	1500
	10.1	Operating pressure for attachments	Mpa	14	14	14
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	260	260	260
	10.7	Sound pressure level at the driver ´s seat	dB (A)	71	71	71
	10.8	Towing coupling, type DIN 15170		Φ 40Pin	Φ 40Pin	Φ 40Pin

12-16t Mast Specification

Type	Model	Lifting height	Overall height				Tilt range	Capacity		
			Lowered		Extended		F/R	Load center@600mm		
			12t	14/16t	12t	14/16t		12t	14t	16t
		mm	mm	mm	mm	mm	(°)	kg	kg	kg
2-stage wide view mast	GXR120/160M300	3000	3180	3290	4695	4790	6/12	12000	14000	16000
	GXR120/160M330	3300	3330	3440	4995	5090	6/12	12000	14000	16000
	GXR120/160M360	3600	3480	3590	5295	5390	6/12	12000	14000	16000
	GXR120/160M400	4000	3680	3790	5695	5790	6/12	12000	14000	16000
	GXR120/160M430	4300	3880	3990	6030	6140	6/12	12000	14000	16000
	GXR120/160M450	4500	3980	4090	6230	6340	6/12	12000	14000	16000
	GXR120/160M480	4800	4130	4240	6530	6640	6/6	12000	14000	16000
	GXR120/160M500	5000	4230	4340	6730	6840	6/6	12000	14000	16000
	GXR120/160M550	5500	4530	4640	7280	7390	3/6	10500	12500	14500
	GXR120/160M600	6000	4780	4890	7780	7890	3/6	9000	11000	13000
	GXR120/160M650	6500	5080	5190	8330	8440	3/6	7500	9500	11500





XH Series 14-18t High-voltage Lithium Battery Forklift Specification

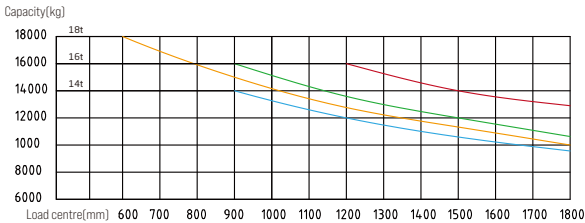
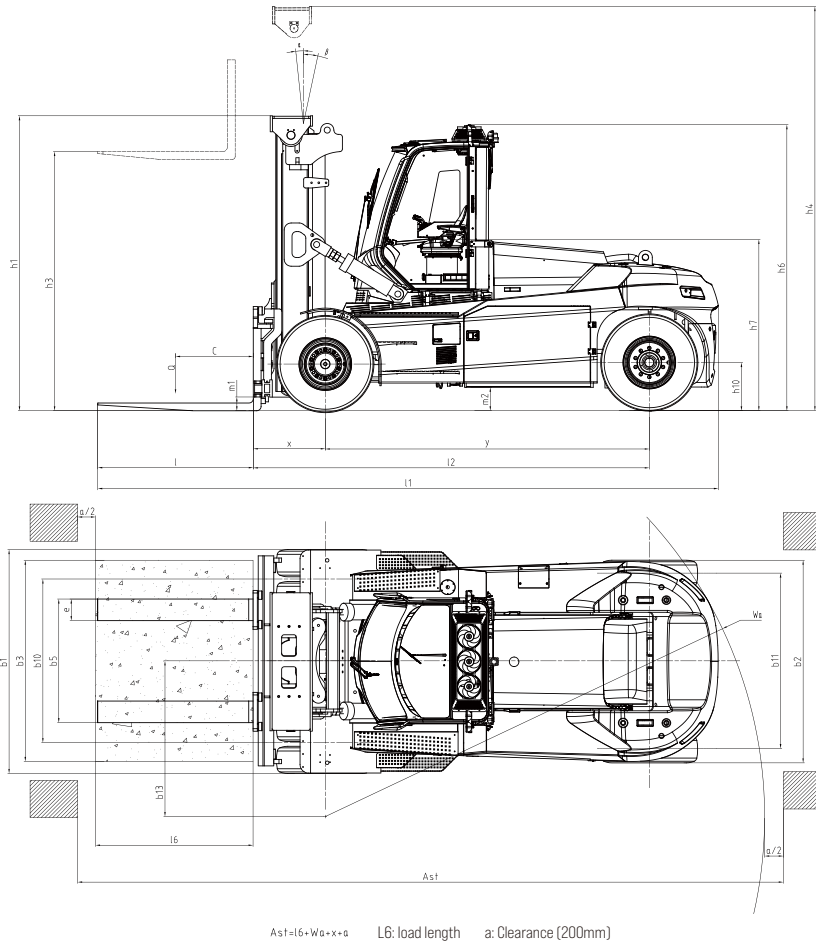
Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation		CPD140-XHL2G	CPD160-XHL2G	CPD180-XHL2G	CPD160-XHAL2G
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	14000	16000	18000	16000
	1.6	Load centre distance	c (mm)	900	900	600	1200
	1.8	Load distance, centre of drive axle to fork	x (mm)	920	920	920	940
	1.9	Wheelbase	y (mm)	3750	3750	3750	3750
	2.1	Service Weight	kg	22800	23800	23400	25500
Weight	2.2	Axle loading, laden front/rear	kg	33120/3680	35900/3900	37592/3808	37850/3650
	2.3	Axle loading, unladen front/rear	kg	11628/11172	11662/12138	11934/11466	13260/12240
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		pneumatic	pneumatic	pneumatic	pneumatic
	3.2	Tyre size, front		12.00-20-20PR	12.00-20-20PR	12.00-20-20PR	12.00-24-20PR
	3.3	Tyre size, rear		12.00-20-20PR	12.00-20-20PR	12.00-20-20PR	12.00-24-20PR
	3.5	Wheels, number front / rear (x = driven wheels)		4x/2	4x/2	4x/2	4x/2
	3.6	Tread, front	b10 (mm)	1894	1894	1894	2013
	3.7	Tread, rear	b11 (mm)	2030	2030	2030	2200
	4.1	Tilt of mast/fork carriage forward/backward	α/β[°]	6/12	6/12	6/12	6/12
Dimensions	4.2	Height, mast lowered	h1 (mm)	3300	3300	3300	3400
	4.4	Lift	h3 (mm)	3000	3000	3000	3000
	4.5	Height, mast extended	h4 (mm)	4800	4800	4800	4900
	4.7	Height of cabin	h6 (mm)	3300	3300	3300	3360
	4.12	Coupling height	h10 (mm)	480	480	480	600
	4.19	Overall length	l1 (mm)	7270	7270	6970	8030
	4.20	Length to face of forks	l2 (mm)	5470	5470	5470	5590
	4.21	Overall width	b1 (mm)	2580	2580	2580	2700
	4.22	Fork dimensions	s/e/l (mm)	90/250/1800	90/250/1800	90/250/1500	110/250/2440
	4.24	Fork-carriage width	b3 (mm)	2510	2510	2510	2640
	4.25	Distance between fork-arms	b5 (mm)	750/2300	750/2300	750/2300	750/2400
	4.31	Ground clearance, laden, below mast	m1 (mm)	250	250	250	250
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	265	265	265	370
	4.34.1	Aisle width for pallets crossways	As1 (mm)	6070+16	6070+16	6070+16	6240+16
	4.35	Turning radius	Wa (mm)	4950	4950	4950	5100
Performance data	5.1	Travel speed, laden/unladen	km/h	27/28	27/28	27/28	22/24
	5.2	Lift speed, laden/unladen	mm/s	350/400	350/400	350/400	350/400
	5.6	Max. Drawbar pull, laden/unladen	N	150000	150000	150000	147000
	5.8	Max. gradeability, laden/unladen	%	20/25	20/25	20/25	24/-
	5.10	Service brake		Wet disc brake system(WDB)			
		Parking brake		Spring Applied,Hydraulic release multidisc brake(SAHR)			
Electric drivetrain	6.1	Drive motor rating S9 60 min Rated/Peak	kW	120/240	120/240	120/240	120/240
	6.2	Lift motor rating at S9 15% Rated/Peak	kW	2x50/100	2x50/100	2x50/100	50×2
	6.4	Battery Capacity	kWh / Ah	184/302	184/302	184/302	184/302
		Nominal Voltage	V	608	608	608	608
	6.5	Battery weight	kg	1790	1790	1790	1790
		Battery dimensions	l/b/h(mm)	1884/715/629	1884/715/629	1884/715/629	1900/1410/600
		Max. battery weight	kg	2200	2200	2200	2400
Addition data	10.1	Operating pressure for attachments	Mpa	15	15	15	15
	10.3	Hydraulic Tank - capacity (drain & refill)	liter	320	320	320	320
	10.7	Sound pressure level at the driver ´s seat	dB (A)	71	71	71	71
	10.8	Towing coupling, type DIN 15170		Φ 50Pin	Φ 50Pin	Φ 50Pin	Φ 50Pin

14-18t Mast Specification

Type	Model	Lifting height	Overall height		Tilt range	Capacity		
			Lowered	Extended		Load center@900mm		Load center@600mm
		mm	mm	mm	F/R	14t kg	16t kg	18t kg
2-stage wide view mast	GXR160/X180M300	3000	3300	4800	6/12	14000	16000	18000
	GXR160/X180M330	3300	3450	5100	6/12	14000	16000	18000
	GXR160/X180M360	3600	3600	5400	6/12	14000	16000	18000
	GXR160/X180M400	4000	3800	5800	6/12	14000	16000	18000
	GXR160/X180M430	4300	4000	6150	6/12	14000	16000	18000
	GXR160/X180M450	4500	4100	6350	6/12	14000	16000	18000
	GXR160/X180M480	4800	4250	6650	6/6	14000	16000	18000
	GXR160/X180M500	5000	4350	6850	6/6	14000	16000	18000
	GXR160/X180M550	5500	4650	7400	3/6	12500	14500	16500
	GXR160/X180M600	6000	4900	7900	3/6	11000	13000	15000
GXR160/X180M650	6500	5200	8450	3/6	9500	11500	13500	

16t@L.C, 1200mm Mast Specification

Type	Model	Lifting height	Overall height		Tilt range	Capacity
			Lowered	Extended	F/R	Load center@1200mm
		mm	mm	mm	(°)	16t kg
2-stage wide view mast	GXR163/X183M300	3000	3400	4900	6/12	16000
	GXR163/X183M330	3300	3550	5200	6/12	16000
	GXR163/X183M360	3600	3700	5500	6/12	16000
	GXR163/X183M400	4000	3900	5900	6/12	16000
	GXR163/X183M430	4300	4100	6250	6/12	16000
	GXR163/X183M450	4500	4200	6450	6/12	16000
	GXR163/X183M480	4800	4350	6750	6/6	16000
	GXR163/X183M500	5000	4450	6950	6/6	16000
	GXR163/X183M550	5500	4750	7500	3/6	15000
	GXR163/X183M600	6000	5000	8000	3/6	14000
	GXR163/X183M650	6500	5300	8550	3/6	12500





Features

Transmission	Standard	Options
Pneumatic tyre	●	
Solid tyre		○
Steering system		
Fully hydraulic power steering	●	
Centralized lubrication system (machine)		○
Truck		
Tow pin	●	
Electrostatic discharge chain		○
Rear-view mirror on right & left mudguards	●	
Operating system		
Integrated joystick	●	
Adjustable steering column	●	
Adjustable armrest	●	
Hydraulic system		
Four-way hydraulic valve	●	
Operation proportion control	●	
Cab		
Cabin	●	
Climate control system (air-conditioning and heater)	●	
Manual tilting cabin	●	
Electric tilting cabin	●	
Radio	●	
Sunshade	●	
USB charging interface	●	
Clothes hanger hook	●	
Reading light	●	
1 x 24V power supply		○
1 x 12V power supply		○
License plate frame		○
Fan	●	
Lifting components		
Duplex mast	●	
Standard lifting height	●	
Optional lifting height		○
Standard fork	●	
Other fork specifications		○
Fork hook on type		○
Hydraulic Fork Positioning	●	
Independently-adjustable fork	● [12-16t]	○ [14-18t]
Built in Sideshift	● [14-18t]	○ [12-16t]
Integrated sideshift	● [14-18t]	○ [12-16t]
Other		
Standard color	●	
User defined colour		○
Fire extinguisher (2kg/4kg)		○
Vehicle toolkit	●	

Electrical System	Standard	Options
Operator Presense System (OPS) with buzzer	●	
LCD display screen	●	
Main power switch	●	
Emergency power off switch	●	
Maintenance-free 24V lead acid battery	●	
Reverse buzzer	●	
High decible horn	●	
LED lights (entire vehicle)	●	
2 x Working light on front mudguard	●	
2 x Front working light on top of cabin	●	
2 x Rear working light on top of cabin	●	
2 x Working light on both sides of mast	●	
Reverse sensor	●	
Rearview camera system	●	
Rearview camera system with memory		○
Front & rearview camera system		○
Front & rearview camera system with memory		○
4 directions camera system with single display		○
4 directions camera recording system with single display		○
In cabin CCTV		○
Rear blue safety light		○
Front and rear blue safety light		○
Three sided blue danger zone light		○
Overspeed alarm		○
Speed limitation		○
Voice reverse alarm		○
Automatic fire suppression system		○
Two-way radio		○
Weight indicator in display		○
Flashing warning light (non rotating) with control switch	●	
Tyre pressure monitoring		○
On-board diagnostics system	●	
Water cooling system for lithium battery	●	
Automatic fire suppression system for lithium battery pack	●	
Manual Service Disconnect (MSD) switch	●	
High voltage interlock	●	
Insulation protection	●	
Power-on self-test	●	
Energy recovery (braking regeneration)	●	
Vehicle Control Unit (VCU)	●	
Turning deceleration		○
Hour meter	●	
Battery charge indicator	●	
Low hydraulic pressure alarm indicator	●	
Hydraulic oil filter warning indicator	●	
Drive mode indicator	●	
Parking brake indicator	●	
Service indicator	●	